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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,145	05/25/2001	Richard Alan Haase		4449

7590 09/25/2007  
Mr Richard Haase  
4402 Ring Rose Drive  
Missouri City, TX 77459

EXAMINER

BARRY, CHESTER T

ART UNIT	PAPER NUMBER
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1724

MAIL DATE	DELIVERY MODE
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09/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/866,145

Applicant(s)

HAASE

Examiner

Chester T. Earry

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 13, 15 - 21, 39/17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 7 - 9, 15 - 18, 21/16, 21/17, 21/18, 21, 39/17 is/are rejected.
- 7) ☒ Claim(s) 6, 10-13, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1724

Sec 112, 2<sup>nd</sup> paragraph Rejections

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 is confusing because it ostensibly introduces the further limitation that the polyacrylamide is "cationic or anionic" even though claims 16 – 18 are already limited to anionic or cationic polyacrylamides..

Art Rejections

Claims 1 – 5, 7 - 9, 15, 17, 21/17, 39/17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eberhard in view of Williams and Lo Sasso.

USP 5019267 to Eberhard describes a method of dewatering biological sludge from a constant 50°C (col 5 line 58) digestion process by adding a cationic polymeric flocculent, i.e., Zetag 92, to the thermophilic biological sludge. As evidenced by USP 5561520 to Williams, Zetag 92 is an ultra-high molecular weight polyacrylamide carrying a medium charge density (col 6 line 10). Accordingly, Eberhard describes a method of dewatering a thermophilic biological sludge in which a cationic polyacrylamide is added to the thermophilic biological sludge. Eberhard does not describe adding aluminum sulfate or ferric chloride to the thermophilic biological sludge.

USP 3642619 to Lo Sasso describes a synergistic benefit is using a combination of cationic polyacrylamide and ferric chloride to effect dewatering of a biological sludge. The skilled artisan would have had a reasonable expectation of success in improved

Art Unit: 1724

dewatering performance of Eberhard's thermophilic biological sludge by using a combination of ferric chloride and Zetag 92, as suggested by Lo Sasso.

Claims 2 and 3 specify more specifically than in claim 1 the chemical identity of the polyquaternary ammonium compound, but none of claims 1 – 5, 7 requires that the polyquaternary ammonium compound or aluminum sulfate be present. Claim 1 merely states that the primary component “*may* also comprise” the polyquaternary ammonium compound (emphasis added”).

Per claims 8-9, the concentration of a dewatering polymer relative to solids content in a dewatering operation was at the time the invention was made known to have an effect on the dewatering performance. Therefore, it would have been obvious to have varied and optimize this parameter for particular sludges.

Per claim 39/17, it was well known to mixed primary sludge with digested sludge in such processes, so it would have been obvious to have done so using Eberhard's process as well. See for example, United States Patents: 4380496, 3613564, 3397139.

Applicant's arguments filed 12/28/06 have been carefully considered, but are not persuasive. All the evidence of both obviousness and non-obviousness was carefully considered, including the Dentel materials.

Claim 16, 18, 21/16, 21/18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eberhard in view of Williams and Lo Sasso.

USP 4193869 is directed to wastewater treatment. It teaches that organic polymers can be used with an inorganic coagulant such as ferric chloride and aluminum sulfate (alum) while USP 5500131 to Metz teaches that combinations of ferric chloride and aluminum sulfate flocculents can be used. It would have been obvious therefore to have used aluminum sulfate in place of ferric chloride, or to have used a combination of ferric chloride and aluminum sulfate in the Eberhard method as modified by Lo Sasso, as suggested by Metz or USP 4193869.

Objection is made to claims 6, 10, 11, 12 – 13, 19 - 20 for dependence on a rejected base claim, but would be allowed if presented in independent form.

Correction of Reissue Declaration filed 5/25/2001 is Required

At paragraph 2, page 2, of the Office action mailed on 6/10/2002, the Office stated:

2. The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414.

In response, on 8/14/2002, Applicant stated at page 13:

**REISSUE OATH/DECLARATION**

2. The Office Action notes that the reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application.

In response, applicant respectfully notes that his "Declaration of Richard Alan Haase," submitted with the reissue application detailed the error. Specifically, the Examiner's attention is kindly directed to paragraphs 6-9 of that Declaration.

At page 3 of 6 of the Reissue Application Declaration and Power of Attorney (aka, "reissue declaration") filed on 5/25/2001, applicant did not check off the box

☐ Corroborating affidavits or declarations of others accompany this declaration.

even though said "Declaration of Richard Alan Haase" accompanied the reissue declaration. Accordingly, applicant needs to correct the reissue declaration by specifically referring to the "Declaration of Richard Alan Haase" filed on 5/25/2001.

**Rejection under 35 USC Sec. 251 - Supplemental Reissue Declaration Required**

In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

At the time the reissue declaration was filed on 5/25/2001, correction of certain errors through reissue of the patent was sought. Specifically, the corrections

Art Unit: 1724

constituted the addition of new claims 16 - 38. After the reissue declaration was filed, various other amendments have amended original claims 1 - 13 & 15, cancelled original claim 14, amended or cancelled certain added claims, and even added another new claim, i.e., claim 39. Consequently, the claims in their present form constitute "corrections" of the patent that were not covered by the initially-filed reissue declaration.

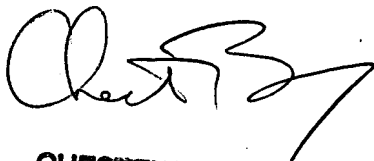
Accordingly, the reissue oath/declaration filed with this application is defective because it fails to contain a statement that ***all errors which are being corrected in the reissue application*** up to the time of filing of the oath/declaration arose without any deceptive intention on the part of the applicant. See 37 CFR 1.175 and MPEP § 1414.

Claims 1 - 13, 15 - 21, 39/17 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth in the preceding paragraphs.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

See MPEP § 1414.01.



CHESTERT. BARRY  
PRIMARY EXAMINER

571-272-1152